

APPENDIX E

CORRESPONDENCE WITH

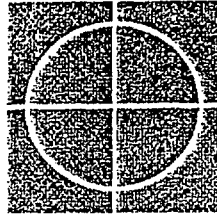
U.S. FISH AND WILDLIFE SERVICE

AND WITH

ARIZONA FISH AND GAME DEPARTMENT

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DMJM



July 28, 2000

Mr. David Harlow
Field Supervisor
US Department of the Interior, Fish & Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4915

RE: Cochise College Airport

Dear Mr. Harlow

DMJM has been engaged by Cochise College to update their 1984 Airport Master Plan. To complete the update we are contacting appropriate federal, state and local agencies that have knowledge related to the airport site, especially those contacted in 1983-1984.

We request that you verify the local flora and fauna data collected from your agency in 1984 regarding potentially significant impacts that might result from improvements to the Cochise College Airport. Special consideration should be given to the presence of threatened and endangered species that may have been added to the list since 1984. (We have printed the Endangered Species List from your website, but do not know which may apply to the subject site.) We have enclosed the original letter from your agency and a vicinity map to assist you.

We are working against a deadline and would appreciate a response prior to August 4, 2000. If you have any questions, please call me at 303.376.2943. Your time and consideration are appreciated.

Yours truly,

A handwritten signature in cursive script, appearing to read "Terri A. Morrell".

Terri A. Morrell, AICP
Senior Planner

Enclosures:

Copy of letter dated October 4, 1983
Vicinity map from Cochise County Planning Department



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE



Ecological Services
2934 W. Fairmount Avenue
Phoenix, Arizona 85017

2-21-84-I-1

October 4, 1983

Mr. Boyd P. Heckel, Airport Planner
Johannessen and Girand
6611 N. Black Canyon Highway
Phoenix, Arizona 85015

Dear Mr. Heckel:

This is in reply to your letter of September 29, 1983, which requested comments regarding the effect of proposed improvements to Cochise College Airport upon listed species or species proposed to be listed as threatened or endangered. Your area of interest is near Douglas, Cochise County, Arizona.

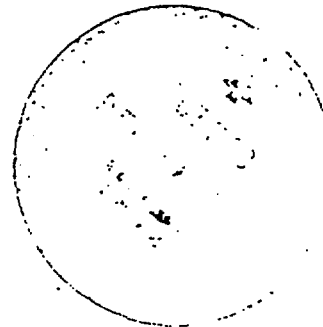
As provided by the Endangered Species Act, the Fish and Wildlife Service furnishes, upon request, information concerning those species, both proposed and listed, which may be affected by various activities.

Our data indicate no listed or proposed candidate species would be affected by the proposed action in the area of interest. If I may of further assistance, do not hesitate to call this office (241-2493).

Sincerely yours,

Gilbert D. Reif
Field Supervisor

cc: Director, Arizona Game and Fish Department, Phoenix, Arizona
Regional Director, (AHR, SE), Fish and Wildlife Service, Albuquerque,
New Mexico





United States Department of the Interior

U.S. Fish and Wildlife Service

2321 West Royal Palm Road, Suite 103

Phoenix, Arizona 85021-4951

Telephone: (602) 640-2720 FAX: (602) 640-2730



In Reply Refer To:

AESO/SE

2-21-84-I-001

July 31, 2000

Ms. Terri A. Morrell, AJCP
Senior Planner
Daniel, Mann, Johnson & Mendenhall
410 17TH Street, Suite 300
Denver, Colorado 80202

RE: Cochise College Updated 1984 Airport Master Plan

Dear Ms. Morrell:

This letter responds to your July 28, 2000, request for an inventory of threatened or endangered species, or those that are proposed to be listed as such under the Endangered Species Act of 1973, as amended (Act), which may potentially occur in your project area (Cochise County). The enclosed list may include candidate species as well. We hope the enclosed county list of species will be helpful. In future communications regarding this project, please refer to consultation number 2-21-84-I-001.

The enclosed list of the endangered, threatened, proposed, and candidate species includes all those potentially occurring anywhere in the county, or counties, where your project occurs. Please note that your project area may not necessarily include all or any of these species. The information provided includes general descriptions, habitat requirements, and other information for each species on the list. Also on the enclosed list is the Code of Federal Regulations (CFR) citation for each list and is available at most public libraries. This information should assist you in determining which species may or may not occur within your project area. Site-specific surveys could also be helpful and may be needed to verify the presence or absence of a species or its habitat as required for the evaluation of proposed project-related impacts.

Endangered and threatened species are protected by Federal law and must be considered prior to project development. If the action agency determines that listed species or critical habitat may be adversely affected by a federally funded, permitted, or authorized activity, the action agency must request formal consultation with the Service. If the action agency determines that the planned action may jeopardize a proposed species or destroy or adversely modify proposed critical habitat, the action agency must enter into a section 7 conference with the Service. Candidate species are those which are being considered for addition to the list of threatened or endangered species. Candidate species are those for which there is sufficient information to support a proposal for

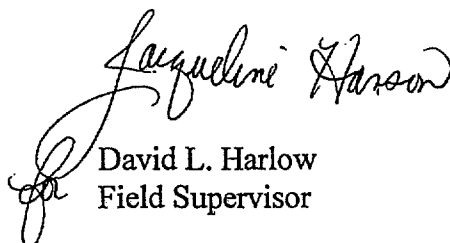
listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event that they become listed or proposed for listing prior to project completion.

If any proposed action occurs in or near areas with trees and shrubs growing along watercourses, known as riparian habitat, the Service recommends the protection of these areas. Riparian areas are critical to biological community diversity and provide linear corridors important to migratory species. In addition, if the project will result in the deposition of dredged or fill materials into waterways or excavation in waterways, we recommend you contact the Army Corps of Engineers which regulates these activities under Section 404 of the Clean Water Act.

The State of Arizona protects some plant and animal species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for State-listed or sensitive species in your project area.

The Service appreciates your efforts to identify and avoid impacts to listed and sensitive species in your project area. If we may be of further assistance, please feel free to contact Tom Gatz.

Sincerely,



David L. Harlow
Field Supervisor

Enclosure

cc: John Kennedy, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

1)LISTED

TOTAL= 21

NAME: CANELO HILLS LADIES' TRESSES

SPIRANTHES DELITESCENS

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: SLENDER ERECT MEMBER OF THE ORCHID FAMILY (ORCHIDACEAE).

FLOWER: STALK 50 CM TALL, MAY CONTAIN 40 WHITE FLOWERS

SPIRALLY ARRANGED ON THE FLOWERING STALK.

ELEVATION

RANGE: about 5000 FT.

COUNTIES: COCHISE, SANTA CRUZ

HABITAT: FINELY GRAINED, HIGHLY ORGANIC, SATURATED SOILS OF CIENEGAS

POTENTIAL HABITAT OCCURS IN SONORA, MEXICO, BUT NO POPULATIONS HAVE BEEN FOUND.

NAME: COCHISE PINCUSHION CACTUS

CORYPHANTHA ROBBINSORUM

STATUS: THREATENED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 51 FR 952, 1-9-1986

DESCRIPTION: A SMALL UNBRANCHED CACTUS WITH NO CENTRAL SPINES AND 11-17

WHITE RADIAL SPINES. THE BELL-SHAPED FLOWERS ARE BORNE ON

THE ENDS OF TUBERCLES (Protrusions). FLOWERS: BELL SHAPED,

PALE YELLOW-GREEN. FRUITS: ORANGE-RED TO RED

ELEVATION

RANGE: >4200 FT.

COUNTIES: COCHISE AND SONORA, MEXICO

HABITAT: SEMIDESERT GRASSLAND WITH SMALL SHRUBS, AGAVE, OTHER CACTI, AND GRAMA GRASS.

GROWS ON GRAY LIMESTONE HILLS.

NAME: HUACHUCA WATER UMBEL

LILAEOPSIS SCHAFFNERIANA ssp RECURVA

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: HERBACEOUS, SEMI-AQUATIC PERENNIAL IN THE PARSLEY FAMILY

(UMBELLIFERAE) WITH SLENDER ERECT, HOLLOW, LEAVES THAT GROW

FROM THE NODES OF CREEPING RHIZOMES. FLOWER: 3 TO 10

FLOWERED UMBELS ARISE FROM ROOT NODES.

ELEVATION

RANGE: 3500-6500 FT.

COUNTIES: PIMA, SANTA CRUZ, COCHISE

HABITAT: CIENEGAS, PERENNIAL LOW GRADIENT STREAMS, WETLANDS

AND IN ADJACENT SONORA, MEXICO, WEST OF THE CONTINENTAL DIVIDE. POPULATIONS ALSO ON FORT HUACHUCA MILITARY RESERVATION. CRITICAL HABITAT IN COCHISE AND SANTA CRUZ COUNTIES (63 FR 37441)

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: NEW MEXICAN RIDGE-NOSED RATTLESNAKE *CROTALUS WILLARDI OBSCURUS*

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 43 FR 34479, 04-04-1978

DESCRIPTION: SMALL 12-24 INCHES, SECRETIVE GRAYISH-BROWN WITH DISTINCT
RIDGE ON THE END OF THE SNOUT. THE DORSAL SURFACE HAS
OBSCURE, IRREGULARLY SPACED WHITE CROSSBARS EDGED WITH
BROWN (NOT A BOLD PATTERN).

ELEVATION

RANGE: 5000-6600 FT.

COUNTIES: COCHISE

HABITAT: PRIMARILY CANYON BOTTOMS IN PINE-OAK COMMUNITIES

THE SUBSPECIES HAS BEEN DOCUMENTED IN THE PELONCILO MOUNTAINS IN ARIZONA. ONLY THREE KNOWN
RECORDS FROM ARIZONA. ALSO OCCURS IN ANIMAS MOUNTAINS OF NEW MEXICO AND SIERRA SAN LUIS IN
SONORA/CHIHUAHUA.

NAME: JAGUAR, UNITED STATES POPULATION

PANTHERA ONCA

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: No CFR: 62 FR 39147, 7-22-97

DESCRIPTION: MUSCULAR CAT WITH RELATIVELY SHORT, MASSIVE LIMBS AND A DEEP-
CHESTED BODY. CINNAMON-BUFF IN COLOR WITH BLACK SPOTS.

ELEVATION

RANGE: <8000 FT.

COUNTIES: COCHISE, PIMA

HABITAT: IN ARIZONA, RANGED WIDELY THROUGHOUT A VARIETY OF HABITATS FROM SONORAN DESERT TO
CONIFER FORESTS

MOST RECORDS ARE FROM THE MADREAN EVERGREEN-WOODLAND, SHRUB-INVADDED SEMI-DESERT GRASSLAND,
AND ALONG RIVERS. HISTORIC RANGE IS CONSIDERED TO HAVE EXTENDED BEYOND THE COUNTIES LISTED
ABOVE. REPORTS OF INDIVIDUALS IN THE SOUTHERN PART OF THE STATE CONTINUE TO BE RECEIVED. THE
MOST RECENT RECORDS OF A JAGUAR IN THE U.S. ARE FROM THE NEW MEXICO/ARIZONA BORDER AREA AND IN
SOUTHCENTRAL ARIZONA, BOTH IN 1996, AND CONFIRMED THROUGH PHOTOGRAPHS. UNCONFIRMED SIGHTINGS
AND TRACKS CONTINUE TO BE REPORTED. THIS SPECIES HAS A SIGNED CONSERVATION AGREEMENT IN PLACE,
BUT THE DEVELOPMENT OF THE AGREEMENT WAS NOT SUFFICIENT TO REMOVE THE NEED TO LIST THIS SPECIES

NAME: LESSER LONG-NOSED BAT

LEPTONYCTERIS CURASOAE YERBABUENAE

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 53 FR 38456, 09-30-88

DESCRIPTION: ELONGATED MUZZLE, SMALL LEAF NOSE, AND LONG TONGUE.
YELLOWISH BROWN OR GRAY ABOVE AND CINNAMON BROWN BELOW.
TAIL MINUTE AND APPEARS TO BE LACKING. EASILY DISTURBED.

ELEVATION

RANGE: <6000 FT.

COUNTIES: COCHISE, PIMA, SANTA CRUZ, GRAHAM, PINAL, MARICOPA

HABITAT: DESERT SCRUB HABITAT WITH AGAVE AND COLUMNAR CACTI PRESENT AS FOOD PLANTS

DAY ROOSTS IN CAVES AND ABANDONED TUNNELS. FORAGES AT NIGHT ON NECTAR, POLLEN, AND FRUIT OF
PANICULATE AGAVES AND COLUMNAR CACTI. THIS SPECIES IS MIGRATORY AND IS PRESENT IN ARIZONA,
USUALLY FROM APRIL TO SEPTEMBER AND SOUTH OF THE BORDER THE REMAINDER OF THE YEAR.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: MEXICAN GRAY WOLF

CANIS LUPUS BAILEYI

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-67; 43

DESCRIPTION: LARGE DOG-LIKE CARNIVORE WITH VARYING COLOR, BUT USUALLY A
SHADE OF GRAY. DISTINCT WHITE LIP LINE AROUND MOUTH. WEIGH 60-
90 POUNDS.

FR 1912, 03-09-78

ELEVATION

RANGE: 4,000-12,000 FT.

COUNTIES: APACHE, COCHISE, GREENLEE, PIMA, SANTA CRUZ

HABITAT: CHAPPARAL, WOODLAND, AND FORESTED AREAS. MAY CROSS DESERT AREAS.

HISTORIC RANGE IS CONSIDERED TO BE LARGER THAN THE COUNTIES LISTED ABOVE. UNCONFIRMED REPORTS
OF INDIVIDUALS IN THE SOUTHERN PART OF THE STATE (COCHISE, PIMA, SANTA CRUZ) CONTINUE TO BE
RECEIVED. INDIVIDUALS MAY STILL PERSIST IN MEXICO. EXPERIMENTAL NONESSENTIAL POPULATION
INTRODUCED IN THE BLUE PRIMITIVE AREA OF GREENLEE AND APACHE COUNTIES.

NAME: OCELOT

LEOPARDUS (=FELIS) PARDALIS

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 47 FR 31670; 07-21-82

DESCRIPTION: MEDIUM-SIZED SPOTTED CAT WHOSE TAIL IS ABOUT 1/2 THE LENGTH
OF HEAD AND BODY. YELLOWISH WITH BLACK STREAKS AND STRIPES
RUNNING FROM FRONT TO BACK. TAIL IS SPOTTED AND FACE IS LESS
HEAVILY STREAKED THAN THE BACK AND SIDES.

ELEVATION

RANGE: <8000 FT.

COUNTIES: SANTA CRUZ, PIMA, COCHISE

HABITAT: HUMID TROPICAL & SUB-TROPICAL FORESTS, SAVANNAHS, AND SEMI-ARID THORNSCRUB.

MAY PERSIST IN PARTLY-CLEARED FORESTS, SECOND-GROWTH WOODLAND, AND ABANDONED CULTIVATION
REVERTED TO BRUSH. UNIVERSAL COMPONENT IS PRESENCE OF DENSE COVER. UNCONFIRMED REPORTS OF
INDIVIDUALS IN THE SOUTHERN PART OF THE STATE CONTINUE TO BE RECEIVED.

NAME: BEAUTIFUL SHINER

CYPRINELLA FORMOSA

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 49 FR 34490, 8-31-1984

DESCRIPTION: SMALL (2.5 INCHES) SHINY MINNOW AND VERY SIMILAR TO RED SHINER.
MALES COLORFUL DURING BREEDING (YELLOW-ORANGE OR ORANGE
ON CAUDAL AND LOWER FINS AND BLuish BODY.

ELEVATION

RANGE: <4500 FT.

COUNTIES: COCHISE

HABITAT: SMALL TO MEDIUM SIZED STREAMS AND PONDS WITH SAND, GRAVEL, AND ROCK BOTTOMS.

VIRTUALLY EXTIRPATED IN THE UNITED STATES, WITH THE EXCEPTION OF A FEW ISOLATED POPULATIONS ON
NATIONAL WILDLIFE REFUGES AND IN MEXICO. SAME CRITICAL HABITAT AS YAQUI CHUB AND CATFISH (SEE 49 FR
34490, 08-31-1984).

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: LOACH MINNOW

TIAROGA COBITIS

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 51 FR 39468, 10-28-1986;

DESCRIPTION: SMALL (<3 INCHES LONG) SLENDER, ELONGATED FISH, OLIVE COLORED
WITH DIRTY WHITE SPOTS AT THE BASE OF THE DORSAL AND CAUDAL
FINS. BREEDING MALES VIVID RED ON MOUTH AND BASE OF FINS

59 FR 10898, 03-08-1994;

ELEVATION

RANGE: <8000 FT.

COUNTIES: PINAL, GRAHAM, GREENLEE, GILA, APACHE, NAVAJO, *YAVAPAI, *COCHISE, *PIMA

HABITAT: BENTHIC SPECIES OF SMALL TO LARGE PERENNIAL STREAMS WITH SWIFT SHALLOW WATER OVER
COBBLE& GRAVEL. RECURRENT FLOODING AND NATURAL HYDROGRAPH IMPORTANT.

PRESENTLY FOUND IN ARAVAIPA CREEK, BLUE RIVER, CAMPBELL BLUE CREEK, SAN FRANCISCO RIVER, DRY
BLUE CREEK, TULAROSA RIVER, EAST-WEST-AND MIDDLE FORKS OF THE GILA RIVER, EAGLE CREEK, EAST FORK,
BLACK RIVER, AND THE MAINSTEM UPPER GILA RIVER. CRITICAL HABITAT WAS REMOVED IN MARCH 1998; BUT
RE-PROPOSED DEC 1999 AND FINALIZED APRIL 2000. SPECIES ALSO FOUND IN CATRON, GRANT, AND HIDALGO
COUNTIES IN NEW MEXICO. *COUNTIES WITH CRITICAL HABITAT PRESENTLY CONTAIN NO KNOWN EXISTING
POPULATIONS OF LOACH MINNOW.

NAME: SPIKEDACE

MEDA FULGIDA

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 51 FR 23769, 07-01-1986;

DESCRIPTION: SMALL (<3 INCHES) SLIM WITH SILVERY SIDES & 'SPINE' ON DORSAL
FIN. BREEDING MALES BRASSY GOLDEN COLOR

59 FR 10906, 03-08-1994;

ELEVATION

RANGE: <6000 FT.

COUNTIES: GRAHAM, PINAL, GREENLEE, YAVAPAI, APACHE*, COCHISE*, GILA*, NAVAJO*, PIMA*

HABITAT: MODERATE TO LARGE PERENNIAL STREAMS WITH GRAVEL COBBLE SUBSTRATES AND MODERATE TO
SWIFT VELOCITIES OVER SAND AND GRAVEL SUBSTRATES. RECURRENT FLOODING AND NATURAL

PRESENTLY FOUND IN ARAVAIPA CREEK, EAGLE CREEK, VERDE RIVER, EAST-WEST- MAIN AND MIDDLE FORKS OF
THE GILA RIVER IN NEW MEXICO, AND GILA RIVER FROM SAN PEDRO RIVER TO ASHURST HAYDEN DAM. CRITICAL
HABITAT WAS REMOVED IN MARCH 1998, BUT RE-PROPOSED DEC 1999 AND FINALIZED IN APRIL 2000. SPECIES
ALSO FOUND IN CATRON, GRANT, AND HIDALGO COUNTIES IN NEW MEXICO. *COUNTIES WITH CRITICAL HABITAT
PRESENTLY CONTAIN NO KNOWN EXISTING POPULATIONS OF SPIKEDACE.

NAME: YAQUI CATFISH

ICTALURUS PRICEI

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 49 FR 34490, 08-31-1984

DESCRIPTION: SIMILAR TO CHANNEL CATFISH (*Ictalurus punctatus*) EXCEPT ANAL FIN
BASE IS SHORTER AND THE DISTAL MARGIN OF THE ANAL FIN IS
BROADLY ROUNDED WITH 23-25 SOFT RAYS. BODY USUALLY
PROFUSELY SPECKLED.

ELEVATION

RANGE: 4000-5000 FT.

COUNTIES: COCHISE

HABITAT: MODERATE TO LARGE STREAMS WITH SLOW CURRENT OVER SAND AND ROCK BOTTOMS

CRITICAL HABITAT ALL AQUATIC HABITATS IN THE MAIN PORTION OF SAN BERNADINO NATIONAL WILDLIFE
REFUGE

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: YAQUI CHUB

GILA PURPUREA

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 49 FR 34490, 08-31-1984

DESCRIPTION: MEDIUM SIZED MINNOW (<6 INCHES) DARK COLORED, LIGHTER BELOW.
DARK TRIANGULAR CAUDAL SPOT

ELEVATION

RANGE: 4000-6000 FT.

COUNTIES: COCHISE (AZ), MEXICO

HABITAT: DEEP POOLS OF SMALL STREAMS, POOLS, OR PONDS NEAR UNDERCUT BANKS.

CRITICAL HABITAT INCLUDES ALL AQUATIC HABITATS OF THE MAIN PORTION SAN BERNADINO NATIONAL WILDLIFE REFUGE.

NAME: YAQUI TOPMINNOW

POECILIOPSIS OCCIDENTALIS SONORIENSIS

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-1967

DESCRIPTION: SMALL (2 INCHES) TOPMINNOW GUPPY-LIKE, LIVE BEARING, LACKING
DARK SPOTS. BREEDING MALES JET BLACK WITH YELLOW FINS.

ELEVATION

RANGE: <4500 FT.

COUNTIES: COCHISE

HABITAT: SMALL TO MODERATE SIZED STREAMS, SPRINGS, & CIENEGAS GENERALLY IN SHALLOWS

NAME: BALD EAGLE

HALIAEETUS LEUCOCEPHALUS

STATUS: THREATENED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 60 FR 35999, 07-12-95

DESCRIPTION: LARGE, ADULTS HAVE WHITE HEAD AND TAIL. HEIGHT 28 - 38";
WINGSPAN 66 - 96". 1-4 YRS DARK WITH VARYING DEGREES OF
MOTTLED BROWN PLUMAGE. FEET BARE OF FEATHERS.

ELEVATION

RANGE: VARIES FT.

COUNTIES: YUMA, LA PAZ, MOHAVE, YAVAPAI, MARICOPA, PINAL, COCONINO, NAVAJO, APACHE, SANTA CRUZ, PIMA,
GILA, GRAHAM, COCHISE

HABITAT: LARGE TREES OR CLIFFS NEAR WATER (RESERVOIRS, RIVERS AND STREAMS) WITH ABUNDANT PREY

SOME BIRDS ARE NESTING RESIDENTS WHILE A LARGER NUMBER WINTERS ALONG RIVERS AND RESERVOIRS. AN ESTIMATED 200 TO 300 BIRDS WINTER IN ARIZONA. ONCE ENDANGERED (32 FR 4001, 03-11-1967; 43 FR 6233, 02-14-78) BECAUSE OF REPRODUCTIVE FAILURES FROM PESTICIDE POISONING AND LOSS OF HABITAT, THIS SPECIES WAS DOWN LISTED TO THREATENED ON AUGUST 11, 1995. ILLEGAL SHOOTING, DISTURBANCE, LOSS OF HABITAT CONTINUES TO BE A PROBLEM. SPECIES HAS BEEN PROPOSED FOR DELISTING (64 FR 36454) BUT STILL RECEIVES FULL PROTECTION UNDER ESA.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: CACTUS FERRUGINOUS PYGMY-OWL

GLAUCIDIUM BRASILIANUM CACTORUM

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: No CFR: 62 FR 10730, 3-10-97

DESCRIPTION: SMALL (APPROX. 7"), DIURNAL OWL REDDISH BROWN OVERALL WITH
CREAM-COLORED BELLY STREAKED WITH REDDISH BROWN. SOME
INDIVIDUALS ARE GRAYISH BROWN

ELEVATION:

RANGE: <4000 FT.

COUNTIES: MARICOPA, YUMA, SANTA CRUZ, GRAHAM, GREENLEE, PIMA, PINAL, GILA, COCHISE

HABITAT: MATURE COTTONWOOD/WILLOW, MESQUITE BOSQUES, AND SONORAN DESERTSCRUB

RANGE LIMIT IN ARIZONA IS FROM NEW RIVER (NORTH) TO GILA BOX (EAST) TO CABEZA PRIETA MOUNTAINS (WEST). ONLY A FEW DOCUMENTED SITES WHERE THIS SPECIES PERSISTS ARE KNOWN, ADDITIONAL SURVEYS ARE NEEDED. CRITICAL HABITAT IN PIMA, COCHISE, PINAL, AND MARICOPA COUNTIES (64 FR 37419).

NAME: MEXICAN SPOTTED OWL

STRIX OCCIDENTALIS LUCIDA

STATUS: THREATENED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 56 FR 14678, 04-11-91

DESCRIPTION: MEDIUM SIZED WITH DARK EYES AND NO EAR TUFTS. BROWNISH AND
HEAVILY SPOTTED WITH WHITE OR BEIGE.

ELEVATION

RANGE: 4100-9000 FT.

COUNTIES: MOHAVE, COCONINO, NAVAJO, APACHE, YAVAPAI, GRAHAM, GREENLEE, COCHISE, SANTA CRUZ, PIMA,
PINAL, GILA, MARICOPA

HABITAT: NESTS IN CANYONS AND DENSE FORESTS WITH MULTI-LAYERED FOLIAGE STRUCTURE

GENERALLY NESTS IN OLDER FORESTS OF MIXED CONIFER OR PONDEROSA PINE/GAMBEL OAK TYPE, IN CANYONS, AND USE VARIETY OF HABITATS FOR FORAGING. SITES WITH COOL MICROCLIMATES APPEAR TO BE OF IMPORTANCE OR ARE PREFERRED. CRITICAL HABITAT WAS REMOVED IN 1998 BUT RE-PROPOSED IN JULY 2000 FOR APACHE, COCHISE, COCONINO, GILA, GRAHAM, GREENLEE, MARICOPA, MOHAVE, NAVAJO, PIMA, PINAL, SANTA CRUZ, AND YAVAPAI COUNTIES.

NAME: NORTHERN APLOMADO FALCON

FALCO FEMORALIS SEPTENTRIONALIS

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 51 FR 6686, 01-25-86

DESCRIPTION: RUFOUS UNDERPARTS, GRAY BACK, LONG BANDED TAIL, AND A
DISTINCT BLACK AND WHITE FACIAL PATTERN. SMALLER THAN
PEREGRINE LARGER THAN KESTREL. BREEDS BETWEEN MARCH- JUNE

ELEVATION

RANGE: 3500-9000 FT.

COUNTIES: COCHISE, SANTA CRUZ

HABITAT: GRASSLAND AND SAVANNAH

SPECIES FORMERLY NESTED IN SOUTHWESTERN US. NOW OCCURS AS AN ACCIDENTAL. GOOD HABITAT HAS LOW GROUND COVER AND MESQUITE OR YUCCA FOR NESTING PLATFORMS. CONTINUED USE OF PESTICIDES IN MEXICO ENDANGERS THIS SPECIES. NO RECENT CONFIRMED REPORTS FOR ARIZONA.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: SOUTHWESTERN WILLOW FLYCATCHER *EMPIDONAX TRAILLII EXTIMUS*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: No CFR: 60 FR 10694, 02-27-95

DESCRIPTION: SMALL PASSERINE (ABOUT 6") GRAYISH-GREEN BACK AND WINGS,
WHITISH THROAT, LIGHT OLIVE-GRAY BREAST AND PALE YELLOWISH
BELLY. TWO WINGBARS VISIBLE. EYE-RING FAINT OR ABSENT.

ELEVATION
RANGE: <8500 FT.

COUNTIES: YAVAPAI, GILA, MARICOPA, MOHAVE, COCONINO, NAVAJO, APACHE, PINAL, LA PAZ, GREENLEE, GRAHAM,
YUMA, PIMA, COCHISE, SANTA CRUZ

HABITAT: COTTONWOOD/WILLOW & TAMARISK VEGETATION COMMUNITIES ALONG RIVERS & STREAMS

MIGRATORY RIPARIAN OBLIGATE SPECIES THAT OCCUPIES BREEDING HABITAT FROM LATE APRIL TO
SEPTEMBER. DISTRIBUTION WITHIN ITS RANGE IS RESTRICTED TO RIPARIAN CORRIDORS. DIFFICULT TO
DISTINGUISH FROM OTHER MEMBERS OF THE EMPIDONAX COMPLEX BY SIGHT ALONE. TRAINING SEMINAR
REQUIRED FOR THOSE CONDUCTING FLYCATCHER SURVEYS. CRITICAL HABITAT ON PORTIONS OF THE 100-YEAR
FLOODPLAIN ON SAN PEDRO AND VERDE RIVERS; WET BEAVER AND WEST CLEAR CREEKS, INCLUDING TAVASCI
MARSH AND ISTER FLAT; THE COLORADO RIVER, THE LITTLE COLORADO RIVER, AND THE WEST, EAST, AND
SOUTH FORKS OF THE LITTLE COLORADO RIVER, REFERENCE 60 CFR:62 FR 39129, 7/22/97.

NAME: WHOOPING CRANE *GRUS AMERICANA*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-1967; 43
FR 20938, 05-15-78

DESCRIPTION: TALLEST AMERICAN BIRD (UP TO 5 FEET) SNOWY WHITE, LONG NECK
AND LEGS, BLACK WING TIPS, RED CROWN, AND BLACK WEDGE
SHAPED PATCH OF FEATHERS BEHIND ITS EYE.

ELEVATION
RANGE: 4500 FT.

COUNTIES: COCHISE

HABITAT: MARSHES, PRAIRIES, RIVER BOTTOMS

BIRDS IN THE ROCKY MOUNTAIN POPULATION ARE OCCASIONAL VISITORS IN ARIZONA DURING MIGRATION.
USUALLY NEAR WILCOX PLAYA.

NAME: SONORA TIGER SALAMANDER *AMBYSTOMA TIGRINUM STEBBINSI*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: No CFR: 62 FR 665, 01-06-97

DESCRIPTION: 2.6 TO 4.9" SNOUT-VENT LENGTH WITH LIGHT-COLORED BANDS ON A
DARK BACKGROUND. AQUATIC LARVAE ARE UNIFORM DARK COLOR
WITH PLUME-LIKE GILLS AND TAIL FINS.

ELEVATION
RANGE: 4000-6300 FT.

COUNTIES: SANTA CRUZ, COCHISE

HABITAT: STOCK TANKS AND IMPOUNDED CIENEGAS IN SAN RAFAEL VALLEY, HUACHUCA MOUNTAINS

ALSO OCCURS IN THE FOOTHILLS OF THE EAST SLOPE OF THE PATAGONIA AND HUACHUCA MOUNTAINS.
POPULATIONS ALSO ON FORT HUACHUCA.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

2) PROPOSED

TOTAL= 2

NAME: MOUNTAIN PLOVER

CHARADRIUS MONTANUS

STATUS: PROPOSED THREATENED CRITICAL HAB No RECOVERY PLAN: No CFR: 64 FR 7587; 02-16-1999

DESCRIPTION: IN BREEDING SEASON WITH WHITE FOREHEAD AND LINE OVER THE EYE; CONTRASTING WITH DARK CROWN; NONDESCRIPT IN WINTER. VOICE IS LOW, VARIABLE WHISTLE.

ELEVATION
RANGE: VARIABLE FT.

COUNTIES: YUMA, PIMA, COCHISE, PINAL, APACHE

HABITAT: OPEN ARID PLAINS, SHORT-GRASS PRAIRIES, AND CULTIVATED FORMS.

SPECIES PRIMARILY FOUND IN ROCKY MOUNTAIN STATES FROM CANADA TO MEXICO. AZ PRIMARILY PROVIDES WINTERING HABITAT. BREEDING HAS BEEN DOCUMENTED, BUT IS RARE, AND IS LIKELY RESTRICTED TO TRIBAL AND STATE LANDS IN APACHE COUNTY.

NAME: CHIRICAHUA LEOPARD FROG

RANA CHIRICAHUENSIS

STATUS: PROPOSED CRITICAL HAB No RECOVERY PLAN: No CFR: 65 FR 37343, 6-14-2000

DESCRIPTION: CREAM COLORED TUBERCULES (spots) ON A DARK BACKGROUND ON THE REAR OF THE THIGH, DORSOLATERAL FOLDS THAT ARE INTERRUPTED AND DEFLECTED MEDIALY, AND A CALL GIVEN OUT OF WATER DISTINGUISH THIS SPOTTED FROG FROM OTHER LEOPRD

ELEVATION
RANGE: 3300-8900 FT.

COUNTIES: SANTA CRUZ, APACHE, GILA, PIMA, COCHISE, GREENLEE, GRAHAM, YAVAPAI, COCONINO

HABITAT: STREAMS, RIVERS, BACKWATERS, PONDS, AND STOCK TANKS THAT ARE FREE FROM INTRODUCED FISH AND BULLFROGS

REQUIRE PERMANENT OR NEARLY PERMANENT WATER SOURCES. POPULATIONS NORTH OF THE GILA RIVER MAY BE CLOSELY-RELATED, BUT DISTINCT, UNDESCRIBED SPECIES.

07/25/2000

3) CANDIDATE

TOTAL= 4

NAME: LEMMON FLEABANE

ERIGERON LEMMONII

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: A PROSTRATE PERENNIAL IN THE SUNFLOWER FAMILY. STEMS AND LEAVES ARE DENSELY HAIRY. FLOWERS LOOK LIKE SMALL DELICATE DAISIES, WITH WHITE TO LIGHT PURPLE OUTER PETALS AND YELLOW INNER PETALS.

ELEVATION

RANGE: 1500-6000 FT.

COUNTIES: COCHISE

HABITAT: GROWS IN DENSE CLUMPS IN CREVICES, LEDGES, AND BOULDERS IN CANYON BOTTOMS IN PINE-OAK WOODLAND

ONE SITE ON FORT HUACHUCA MILITARY RESERVATION

NAME: BLACK-TAILED PRAIRIE DOG

EYOMYS LUDOVICIANUS

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: SMALL, STOUT GROUND SQUIRRELS. TOTAL LENGTH OF ADULT 14-17 INCHES; ABOUT 1-3 LBS. INDIVIDUALS IN MIXED COLORS OF BROWN, BLACK, GRAY, AND WHITE. BLACK-TIPPED TAIL. A SOCIAL ANIMAL LIVING IN AGGREGATIONS CALLED TOWNS, COLONIES, OR VILLAGES.

ELEVATION

RANGE: APPROX. 5,FT.

COUNTIES: COCHISE, GRAHAM, AND GREENLEE

HABITAT: IN BURROWS IN PLAINS AND GRASSLAND HABITATS.

SPECIES IS CURRENTLY EXTIRPATED FROM THE STATE, BUT CONSERVATION EFFORTS ARE UNDERWAY. TWELVE-MONTH PETITION FINDING PUBLISHED 2/4/00. EXTIRPATED FROM AZ AROUND 1938. REINTRODUCTION ATTEMPTED IN 1972, BUT FAILED.

NAME: GILA CHUB

GILA INTERMEDIA

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: DEEP COMPRESSED BODY, FLAT HEAD. DARK OLIVE-GRAY COLOR ABOVE, SILVER SIDES. ENDEMIC TO GILA RIVER BASIN.

ELEVATION

RANGE: 2000 - 3500 FT.

COUNTIES: SANTA CRUZ, GILA, GREENLEE, PIMA, COCHISE, GRAHAM, YAVAPAI

HABITAT: POOLS, SPRINGS, CIENEGAS, AND STREAMS

MULTIPLE PRIVATE LANDOWNERS, INCLUDING THE NATURE CONSERVANCY, THE AUDUBON SOCIETY, AND OTHERS. ALSO FT. HUACHUCA. SPECIES ALSO FOUND IN SONORA, MEXICO.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

NAME: HUACHUCA SPRINGSNAIL

PYRGULOPSIS THOMPSONI

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: VERY SMALL (1.7-3.2mm) CONICAL SHELL. IDENTIFICATION MUST BE
VERIFIED BY CHARACTERISTICS OF REPRODUCTIVE ORGANS.

ELEVATION

RANGE: 4500-6000 FT.

COUNTIES: COCHISE, SANTA CRUZ

HABITAT: AQUATIC AREAS, SMALL SPRINGS WITH VEGETATION SLOW TO MODERATE FLOW.

INDIVIDUALS FOUND ON FIRM SUBSTANCES (ROOTS, WOOD, AND ROCKS) OTHER POPULATIONS FOUND ON FORT
HUACHUCA MILITARY PROPERTY

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

COCHISE

07/25/2000

CONSERVATION AGREEMENT

TOTAL= 2

NAME: JAGUAR, UNITED STATES POPULATION *PANTHERA ONCA*

STATUS: CONSERVATION AGREEMENT CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: MUSCULAR CAT WITH RELATIVELY SHORT, MASSIVE LIMBS AND A DEEP-
CHESTED BODY, CINNAMON-BUFF COLOR WITH BLACK SPOTS

ELEVATION
RANGE: FT.

COUNTIES: COCHISE, PIMA

HABITAT: WIDELY RANGING HABITAT FROM SONORAN DESERT TO CONIFER FORESTS

MOST RECORDS ARE FROM THE MADREAN EVERGREEN-WOODLAND, SHRUB-INVADDED SEMI-DESERT GRASSLAND, AND ALONG RIVERS. HISTORIC RANGE IS CONSIDERED TO HAVE EXTENDED BEYOND THE COUNTIES LISTED. THIS SPECIES HAS A SIGNED CONSERVATION AGREEMENT IN PLACE, BUT THE DEVELOPMENT OF THE AGREEMENT WAS NOT SUFFICIENT TO REMOVE THE NEED TO LIST THIS SPECIES.

NAME: RAMSEY CANYON LEOPARD FROG *RANA SUBAQUAVOCALIS*

STATUS: CONSERVATION AGREEMENT CRITICAL HAB No RECOVERY PLAN: No CFR: 59 FR 58996

DESCRIPTION: BROWN OR GREEN FROG, 2.5 TO 4 INCHES LONG; SPOTS ROUNDED
WITH LIGHT BORDERS; DORSOLATERAL FOLDS ARE INTERRUPTED
POSTERIORLY AND DEFLECTED MEDIALY; YELLOWISH PIGMENTATION
ON THE GROIN WHICH MAY EXTEND INTO THE POSTERIOR VENTER

ELEVATION
RANGE: 5,000 FT FT.

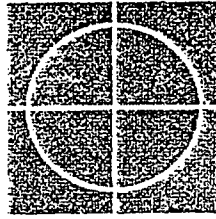
COUNTIES: COCHISE

HABITAT: ARTIFICIAL PONDS IN TINKER, BROWN, AND RAMSEY CANYONS ON THE EAST SLOPE OF THE HUACHUCA MOUNTAINS.

CONSERVATION AGREEMENT BETWEEN THE SERVICE, ARIZONA GAME AND FISH DEPARTMENT, THE NATURE CONSERVANCY, BUREAU OF LAND MANAGEMENT, CORONADO NATIONAL FOREST, THE US ARMY INTELLIGENCE CENTER AND FORT HUACHUCA, AND A PRIVATE LANDOWNER WAS SIGNED IN AUGUST 1996. SPECIES ALSO OCCURS ON FORT HUACHUCA.

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DMJM



July 28, 2000

Ms. Sherry Ruther
Region 5
Arizona Game and Fish Department
555 N. Greasewood Road
Tucson, AZ 85745

RE: Cochise College Airport

Dear Ms. Ruther:

Thank you for taking my call yesterday afternoon. As I explained, DMJM has been engaged by Cochise College to update their 1984 Master Plan. To complete the update we are contacting appropriate federal, state and local agencies that have knowledge related to their site, especially those contacted in 1983-1984.

We request that you verify the local flora and fauna data collected from your agency in 1984 regarding potentially significant impacts that might result from improvements to the Cochise College Airport. Special consideration should be given to the presence of threatened and endangered species that may have been added to the list since 1984. We have enclosed the original letter and a vicinity map to assist you.

We are working against a deadline and would appreciate a response prior to August 4, 2000. If you have any questions, please call me at 303.376.2943. Your time and consideration are appreciated.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Terri Morrell'.

Terri A. Morrell, AICP
Senior Planner

Enclosures:

Copy of letter from Terry B. Johnson dated October 7, 1983
Vicinity map from Cochise County Planning Department

BRUCE BABBITT, Governor

Commissioners:

ANK FERGUSON, JR., Yuma, Chairman
ANCES W. WERNER, Tucson
TIS A. JENNINGS, Scottsdale
N J. GIST, Flagstaff
S. BAKER, Elgin

Director

BUD BRISTOW

Deputy Director

JOHN J. GRUENEWALD



ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

October 7, 1983

Boyd Heckel
Johannessen and Girand
Consulting Engineers
6611 North Black Canyon Highway
Phoenix, Arizona 85015



Dear Mr. Heckel:

Recently you inquired as to potential occurrences of threatened or endangered species in T24S, R26E, S3 and 10. I reviewed all information in the Nongame Branch data base and have determined that we know of no state or federally listed threatened or endangered plants or animals in that locality. Further, the vegetation in that area is largely degraded Chihuahuan desertscrub and tobosa grassland and is not significantly valuable to wildlife in general, especially considering the adjacent airport developments. However, in developing mitigation measures, we encourage you to consider promoting recovery of grasslands in the area (perhaps through re-seeding with native grasses). This could have benefits for scaled quail.

Sincerely,

Bud Bristow, Director

Terry B. Johnson
Nongame Branch Supervisor

TBJ:rp

cc: V. Supplee (Region V)
cc: D. Roe (Research)



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4399
(602) 942-3000 • WWW.AZGFD.COM

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DUANE L. SHROUFE
DEPUTY DIRECTOR
STEVE K. FERRELL



Tucson Office, 555 N. Greasewood Rd., Tucson, AZ 85745

July 31, 2000

Ms. Terri Morrell
DMJM
410 17th Street, Ste. 300
Denver, Colorado 80202

Re: Cochise College Airport – Master Plan Update; T24S, R26E, Sections 3 & 10.

Dear Ms. Terri Morrell:

As requested, the Arizona Game & Fish Department (Department) is providing updated information on special status species that may occur in the vicinity of the above-referenced project (See Attachment A). This list in Attachment A is based on the review of records in the Department's Heritage Data Management System¹ (HDMS). These species are likely to occur on-site to the extent that suitable habitat is available. Also enclosed is the fact sheet on the Chiricahua leopard frog that was downloaded from the U.S. Fish & Wildlife Service's (USFWS) web site. This information will assist you in determining whether the airport expansion areas are likely to support habitat resources suitable for the Chiricahua leopard frog. If you require additional assistance regarding the project and likely impacts to the Chiricahua leopard frog, please contact the USFWS. A suggested contact is:

Ms. Sherry Barrett
Asst. Field Supervisor
U.S. Fish & Wildlife Service
AZ Ecological Services Tucson Field Office
300 W. Congress, Room 6J
Tucson, Arizona 85701
520/670-4617


¹ Information contained in the Department's HDMS is dynamic and updated on a periodic basis. Any information, therefore, is likely to become outdated shortly after its release. Such information is intended to serve as a guide regarding what species may be found in a particular area. It does not represent the results of comprehensive species-specific surveys.

Ms. Morrell
July 31, 2000
2

Assuming the site does not support aquatic habitats, and considering that all of the proposed ground disturbance-related expansions are internal to the existing facilities, the Department does not anticipate that the State's wildlife resources will be adversely impacted as the result of implementing the proposed project.

Please contact me at 520/628-5982 Ext. 137 if you have questions or require additional information.

Sincerely,



Sherry A. Ruth
Habitat Specialist

SAR:sr

Attachment

cc: John Kennedy, Project Evaluation Coordinator, Habitat Branch, PHX (AGFD Log No. 7-28-00/03)
Brad Fink, District Wildlife Manager
Sherry Barrett, USFWS, Assist. Field Supervisor, Az Ecol. Services Field Ofc, TUC

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Ms. Morrell
July 31, 2000
3

ATTACHMENT A
SPECIAL STATUS SPECIES
COCHISE COLLEGE AIRPORT MASTER PLAN

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>
Chiricahua leopard frog	<i>Rana chiricahuensis</i>	PT,WC,S

STATUS DEFINITIONS

- PT - Proposed Threatened.** Species being reviewed by the U.S. Fish and Wildlife Service for listing as Threatened under the Endangered Species Act.
- WC - Wildlife of Special Concern in Arizona.** Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Department's listing of **Wildlife of Special Concern in Arizona** (WSCA, in prep.). Species included in WSCA are currently the same as those in **Threatened Native Wildlife in Arizona** (1988).
- S - Sensitive.** Species classified as "sensitive" by the Regional Forester when occurring on lands managed by the U.S.D.A. Forest Service.

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